

WE ALWAYS LEAD!

JANUARY PRICES IN NOVEMBER

WE ALWAYS LEAD!

Was never known before in Grand Rapids, but we start the fun Monday, November 21, and keep it up until the season is over, notwithstanding the unfavorable weather. We cannot find time to quote prices—all we can say is

COME TO SIEGEL'S!

The only exclusive Cloak, Suit and Fur House in this State. Nothing is reserved—everything must go in the line of Cloaks, Suits, Tea Gowns and Wrappers for Ladies, Cloaks for Misses, Children and Infants, Silk Skirts, Waists and Mackintoshes. Fur Goods of every description for Ladies, Misses and Children. All these articles go now at JANUARY PRICES at

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We advise merchants of surrounding towns to take advantage of this sale.

Selection of garments sent to any place C. O. D., privilege of examination to select from. All that is necessary is to send best measure and colors preferred.

FALLS ARE OF USE

Water From Niagara Used to Drive Machinery.

A WONDERFUL ENGINEERING

Work—Everlasting Supply of Power at a Comparatively Trifling Cost to Consumers.

No engineer ever looked at the spectacle of power displayed by Niagara falls without a feeling that it was a crime to allow the enormous energy there stored up to run to waste from eternity to eternity. The artist is content to steep his soul in the beauty of the scene, but the average utilitarian American is likely to do some figuring on horsepower and available units of work. The prophecies of years are about to materialize in a great power plant which will utilize 100,000 of the 15,000,000 of horsepower going to waste over the falls, and \$2,500,000 has been expended, and the water wheels will be in place and the sluices will be opened.

From the early years of the ownership of the falls by the Porter family the advantages of the great water power were freely discussed, but nothing was done until about 1850, when Horace A. Dey caused the construction of a canal, which takes water from a point above the rapids and conducts it to a set of mills built on the banks below the falls and now known as Schoellkopf's mills. The Niagara river makes a bend at a right angle, and the falls are at the apex of that angle. This canal forms the hypotenuse of a right angled triangle, of which the longest side is the river above and the shortest side the river below the falls. The mills are near the falls and are not a picturesque feature of the scenery.

The turbines which drive the mills are sunk in pits only about fifty or sixty feet deep, and consequently their tail races discharge a hundred feet or more above the surface of the rapids below the falls, and half of the available power of the water hushed down by the canal is thus wasted. Less than 6,000 horsepower is utilized.

The new works have reversed this plan of a long supply canal and a short tailrace. They have been constructed on a modification of a plan first proposed by Thomas Duerksen, a division engineer of the New York state canals. The plan is to have the mills on the banks above the falls and at a distance from the scenic locality, and then to have a long tunnel to carry the waste water down to the rapids.

cult and costly part of the work so far. It was cut through solid limestone rock, but the rock was found to crumble so badly after exposure that the whole 7,000 feet of the tunnel had to be bricked up. It is in the form of a horseshoe, twenty-eight feet high and eighteen feet broad, inside dimensions. Starting at a depth of 160 feet it has a downward slope or pitch of four feet in a thousand at first, increasing to seven feet in a thousand. Its mouth where it discharges into the rapids is 214 feet below the brink of the cliffs which form the ravine. Its cross section is 365 square feet, and at the speed of twenty feet a second, with which the water will rush out of it, there will be a discharge of about 50,000 gallons every minute.

And yet this enormous amount of water will not show any appreciable level whatever on the magnificent volume of Niagara. It will lower the level of the great flood only about one and a half inches. The extent and constancy of this water power can be understood when it is realized that the water service of the great lakes, with the land sloping into them and contributing to the Falls of Niagara, has a total drainage basin of over 340,000 square miles—equal to more than twice the area of Great Britain and Ireland, about 40,000 square miles more than the total area of France, and more than fifteen times the total area of Switzerland. The Horseshoe falls are 158 feet high and 2,000 feet wide. The other channel, in the state of New York, forms the American falls, which are 160 feet high at the eastern side, and 1,000 feet wide, both falls comprising 3,600 linear feet of water.

The extreme limits of variation in the depth of the river at different times above the falls are 3½ feet, but these limits are rarely reached. The ordinary variation is about one foot. Below the falls the extreme variation reaches fifteen feet. Generally a variation of one foot above the falls is followed by a change of level of five feet below the falls. These slight changes are of short duration, and are due mainly to long continued and violent wind or sudden great accumulations of ice.

The average discharge of water at the outlet of Lake Erie into the Niagara river is estimated by some authorities at 265,000 cubic feet a second. Moreover, as far as this or the next two generations are concerned, it doesn't matter whether there is any rainfall, for there are 6,000 cubic miles of water backed up in the little mill pond of the Niagara Falls Power company, which is sufficient to run the falls in their present style for 100 years without the help of another drop from the clouds.—New York Tribune.

FOR

FAT

FOLKS.

Dr. Edison's FAMOUS PILLS AND BANDS and OBESITY FRUIT SALT reduce your weight without dieting; cures the causes of obesity, such as dyspepsia, rheumatism, nervousness, catarrh, kidney troubles; keeps you healthy, and beautifies the complexion.

CHICAGO FOLKS OF TRADE. I again write you to say I have lost 13 pounds, making 42 pounds lost in 10 weeks by using 4 bottles of Dr. Edison's Obesity Pills and wearing his Obesity Band.

Very truly yours, CHARLES H. KING. Prof. Hare, Chicago University, writes to the Chicago Herald, Sept. 18, 1922: "Compulsive men should pay some attention to reducing their weight. When a man is troubled with rheumatism, dyspepsia, kidney trouble or nervousness the reducing of weight is slower, until the Obesity Pills have cured the disease that caused obesity. The pills soften and beautify the skin of the face. I am at liberty to cite a case in point. Under my advice Mr. Armour used an Edison Obesity Band and 3 bottles of Pills and lost 29 pounds in 6 weeks. Other patients have been equally successful."

Sold by Druggists. Band measure at numbers 1, 2, 3. Price \$2.50 to 30 inches, and 10 cents extra for each additional inch. Pills \$1.50 a bottle, or three bottles for \$4.00, enough for one treatment. Obesity Fruit Salt \$1.50 per bottle. You can buy the Pills, Bands and Salt direct from our stores, or by mail or express. Correspondence and goods forwarded in plain, sealed packages. Notice: Dr. Edison's Electric Belts and Finger Rings are sold at our stores. Send for our special Electric Belt Circular, sealed. Electric Belts \$1.50 and up. Insoles 50 cents per pair. Loring & Co., Proprietors and Gen'l Agts., 38 A East Washington St., Chicago, Ill. (not an apothecary store, but parlor, 215-B, no one night). 222 Hamilton Place, Boston, Mass. 40 A 2 West 22nd St., New York City. Cut this out and keep it, and send for our full (eight column) article on Obesity.

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SUNDAY IN THE CITY

IS ALWAYS DULL.

So let's talk about something interesting. The news is always interesting; therefore, we'll give you some news for a first course. Grover Cleveland is elected. "Oh, that's old," you say. Well, if that is antiquated, how about

Burkhardt's Furniture

New, neat and stylish, every piece of it. That's no news, either, but it's interesting just the same. Cut off a dog's tail and he can't walk straight—why not? It acts as a rudder and the wind blows him off his course without it. You think that's a joke, no doubt, but the dog don't. Let's look at this picture of a Ladies' Parlor Desk. It's a beauty and no mistake. We have lots of them at from \$6.00 to \$15.00.



They are one of the most useful and ornamental articles for the house. Then you want a nice chair to go with it. We have plenty of them of all kinds and at all prices. It seems very comfortable, after a hard day's work, to sit down in a nice easy chair, don't it? Then when bed time comes, if you have a nice, roomy bed to get into, soft mattress and good springs, with an appropriate suite in connection, you'll get up the next morning, feeling fresh as daisy and ready again for the battle of life.

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